

## Patent Abstracts of Japan

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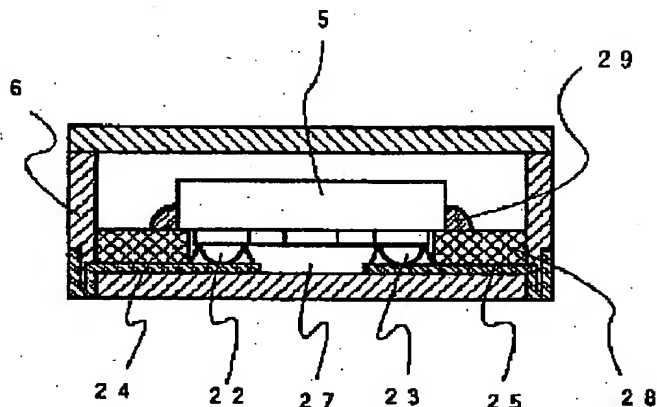
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TITLE : STRUCTURE OF SURFACE MOUNTED  
PIEZOELECTRIC PARTS



**ABSTRACT :** **PURPOSE:** To eliminate the possibility of staining the vibration proof electrode of a piezoelectric resonator and stopping an oscillation by fixing the vibration proof part of this piezoelectric resonator by adhesive by arranging pedestals which are almost the same as a bump in height at the internal bottom surface of a package so that the end part may overlap with the outer peripheral part of a piezoelectric element.

**CONSTITUTION:** After conductive parts 24 and 25 are provided at the internal bottom surface of a package 6, a pedestal 28 of insulating glass having the same thickness as the heights of bumps 22 and 23 is provided. On this pedestal, the outer peripheral part of a SAW resonator 5 is mounted so as to overlap with the pedestal. Further, after the SAW resonator 5 and the package 6 are connected by a flip chip method, the SAW resonator 5 and the pedestal 28 are fixed by the silicon system or epoxy system adhesive 29 applied to the outer peripheral part of the SAW resonator 5. Because this resonator 5 and the pedestal 28 adhere, the adhesive 29 does not intrude in the clearance 27 of the resonator 5 and the package 6 even if the adhesive 29 is made into gel in a manufacturing process, and the adhesive does not stain the IDT electrode of the resonator 5 or does not fix a surface wave propagation route area.

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